ABSTRACT OF THE DISCLOSURE

A method and apparatus are disclosed for performing a shortest path first network routing path determination in a data communications network based in part on information about links that are associated as shared risk link groups. Micro-loops are avoided in computing shortest path first trees by considering whether links are within shared risk link groups. In a first approach, for each link state packet in a link state database, listed adjacencies are removed if the link between the node originating the LSP and the reported adjacency belongs to a shared risk link group for which one component (local link) is known as down, and a shortest path first computation is then performed. In a second approach, during the SPT computation and after having added a first node to a path, each neighboring node is added to a tentative tree if and only if, a link between the first node and the neighboring node does not belong to a shared risk link group for which one component (local link) is known as down.

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